

Unit 11.5

Line of Best Fit

Day 1

## Demand for Soft Drinks

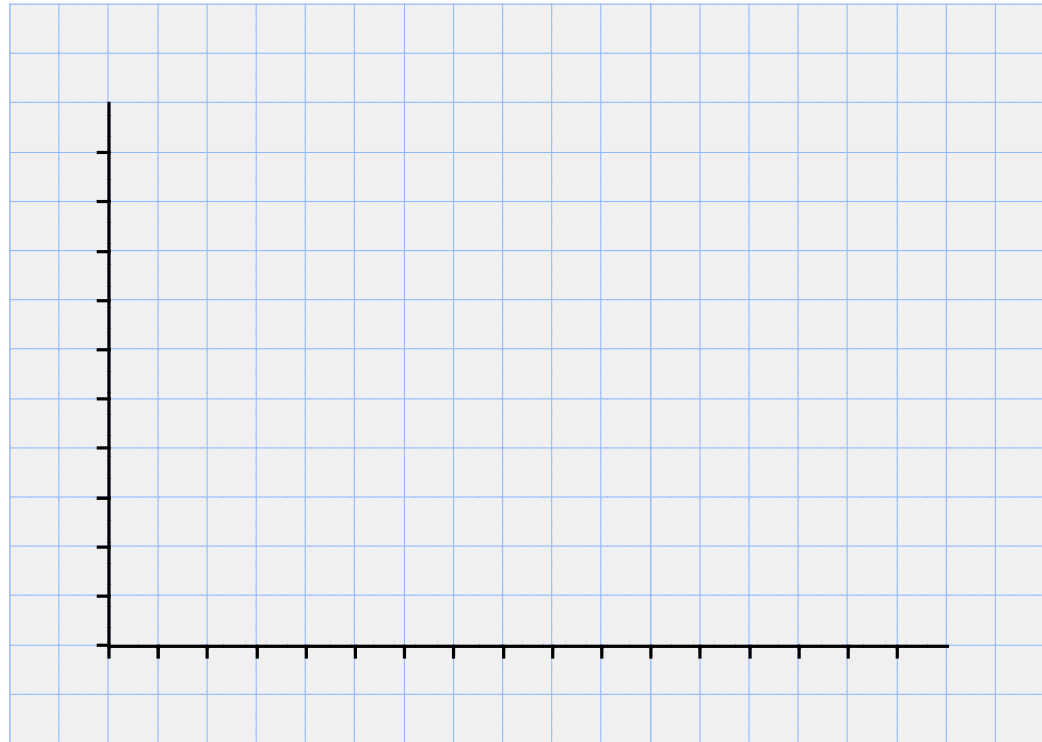
High	Cans sold
55	340
58	335
64	410
68	460
70	450
75	610

Ordered pairs:

Points used:

Slope:

Finding the Equation:



High	Cans
55	340
58	335
64	410
68	460
70	450
75	610
80	735
84	780

Ordered pairs: (55, 340), (58, 335), (64, 410), (68, 460)

Points used

(60, 350), (90, 800)

Slope:

$$m = \frac{800 - 350}{90 - 60} = \frac{450}{30} = 15$$

Finding the Equation:

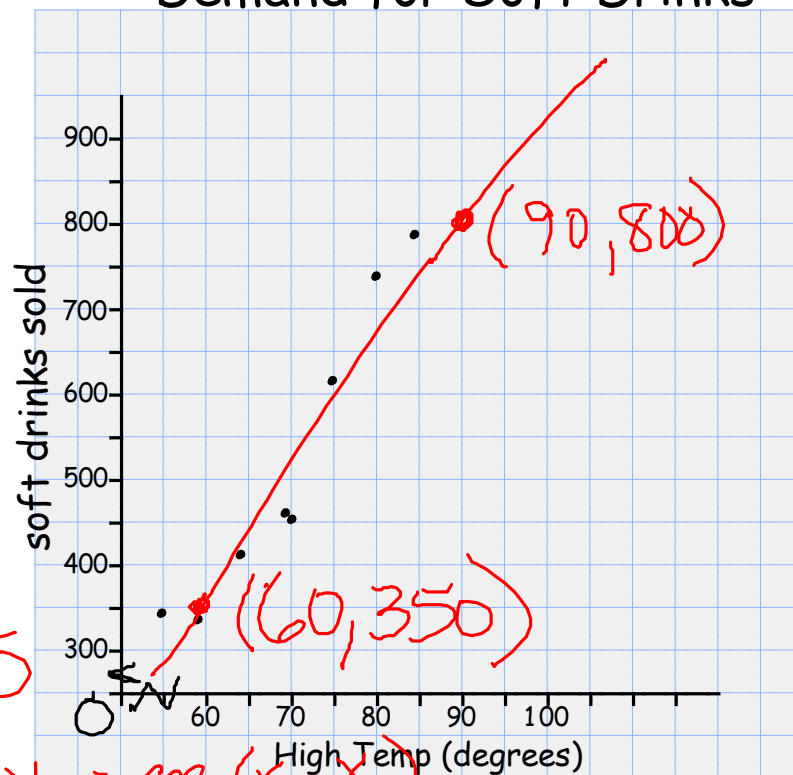
$$y - y_1 = m(x - x_1)$$

$$y - 350 = 15(x - 60)$$

$$y - 350 = 15x - 900$$

$$y = 15x - 550$$

## Demand for Soft Drinks





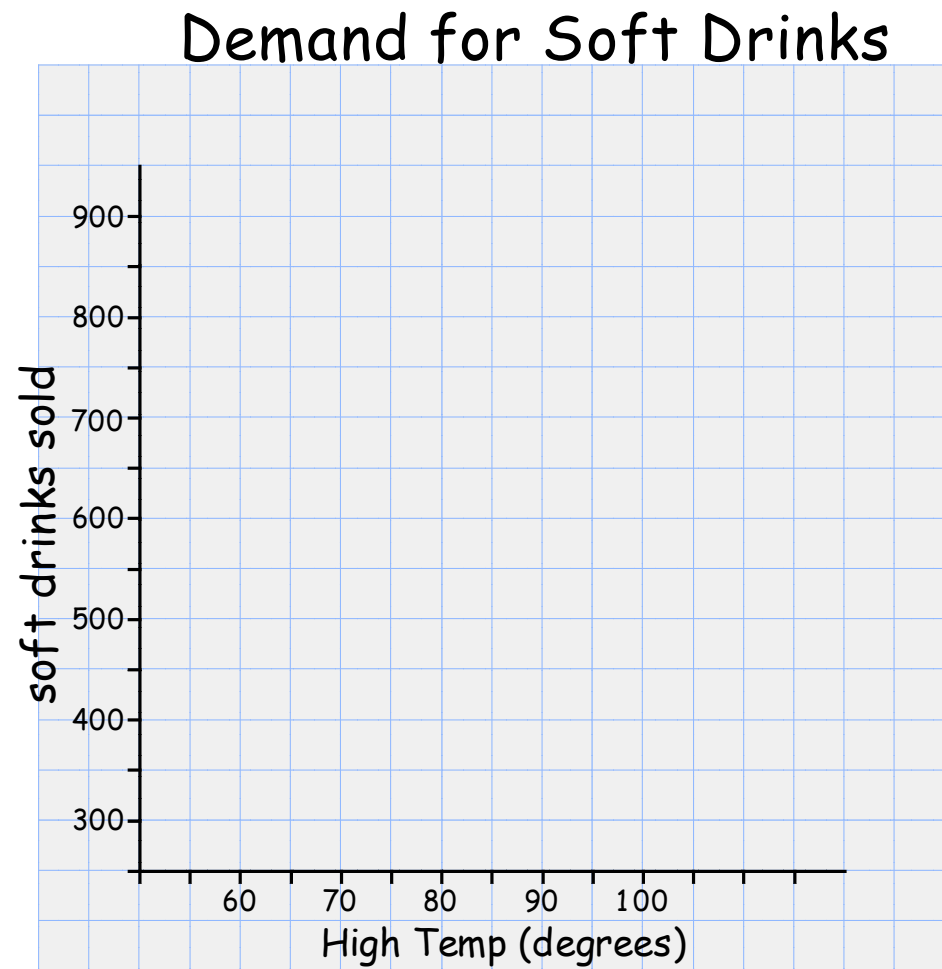
High	Cans
55	340
58	335
64	410
68	460
70	450
75	610
80	735
84	780

Ordered pairs:

Points used:

Slope:

Finding the Equation:

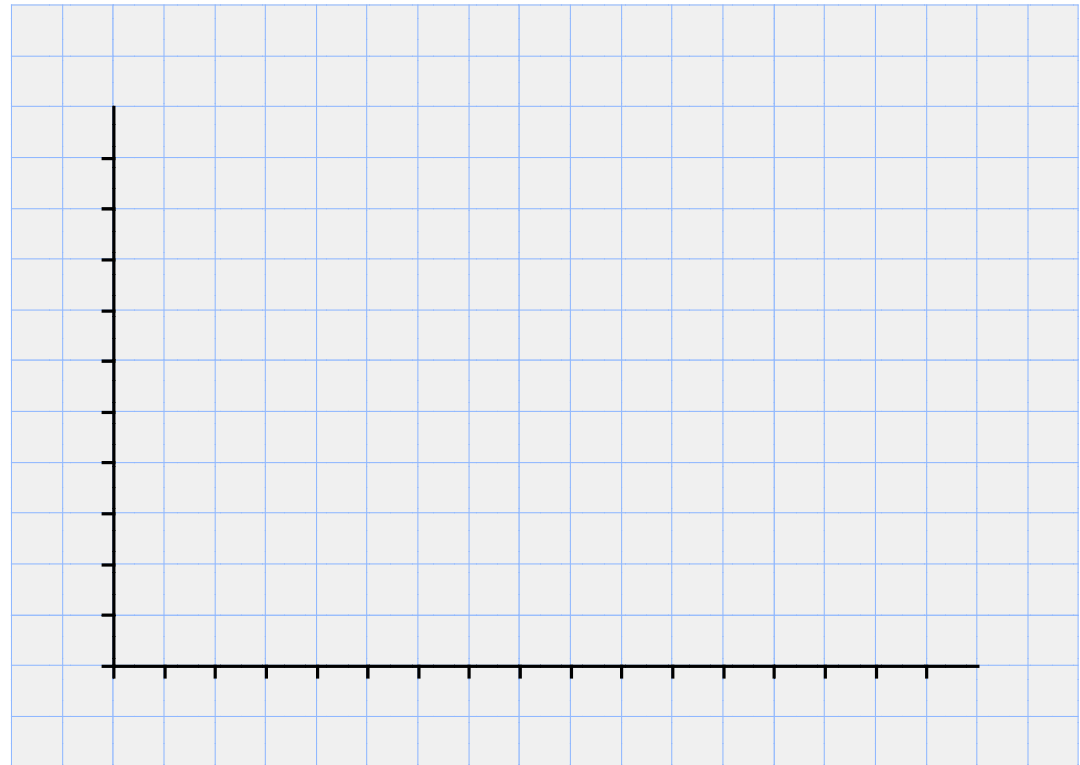


1)

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
Dividend	\$1.14	\$1.20	\$1.27	\$1.29	\$1.43	1.53	\$1.60	\$1.66	\$1.76

## Dividends

Ordered pairs:



Points used:

Slope:

Finding the Equation:

2)

Diameter (in.)	2.5	4.0	6.0	8.0	9.0	9.5	12.5	15.5
Age (years)	15	24	32	56	49	76	90	89

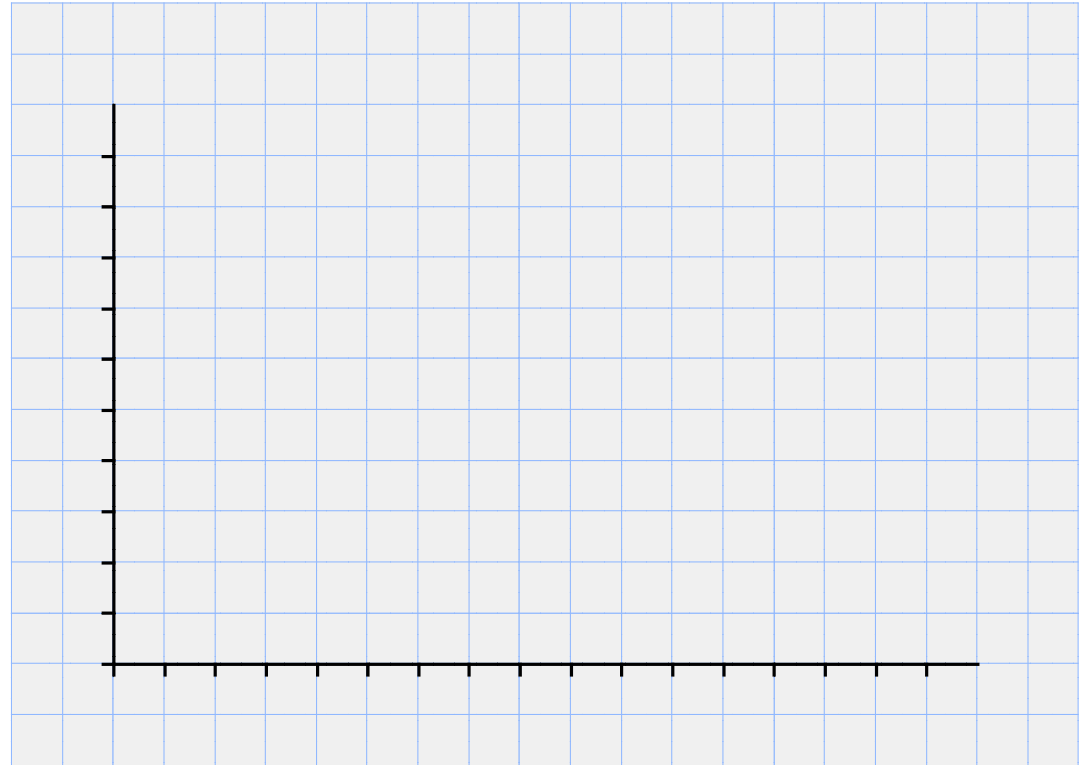
## Tree Diameter and Age

Ordered pairs:

Points used:

Slope:

Finding the Equation:



3)

Year	1987	1992	1996	2000	2001	2003	2004
Households	8.2	15	22.8	36.6	42.1	51	55

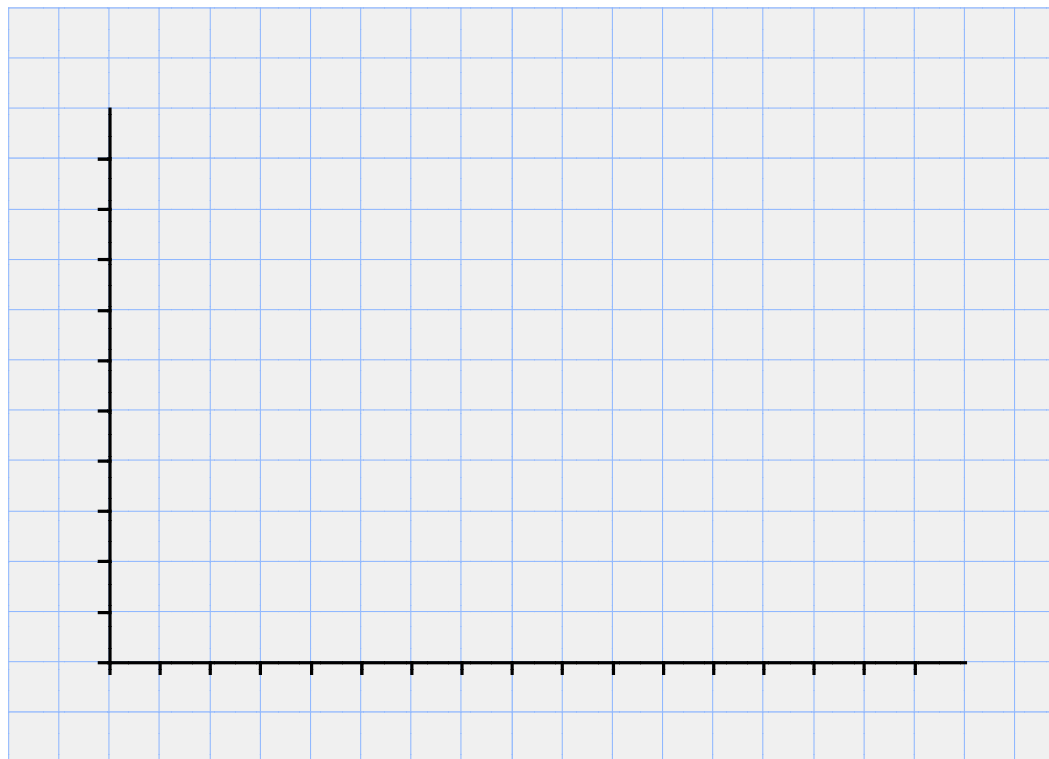
## Home Computers

Ordered pairs:

Points used:

Slope:

Finding the Equation:





4)

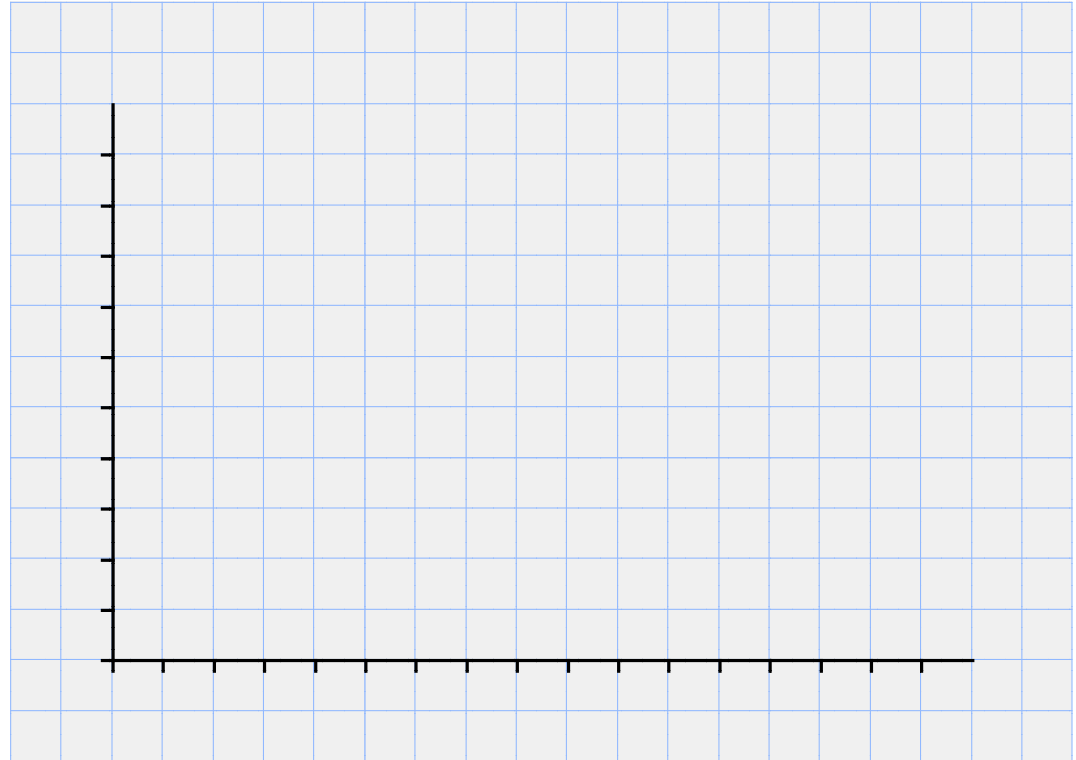
x	-2	-1	-0.5	0	0.5	1	2	3	3.5	4
y	1.25	1.5	1.5	2	1.75	2	2.5	2.5	2.75	3.25

Ordered pairs:

Points used:

Slope:

Finding the Equation:



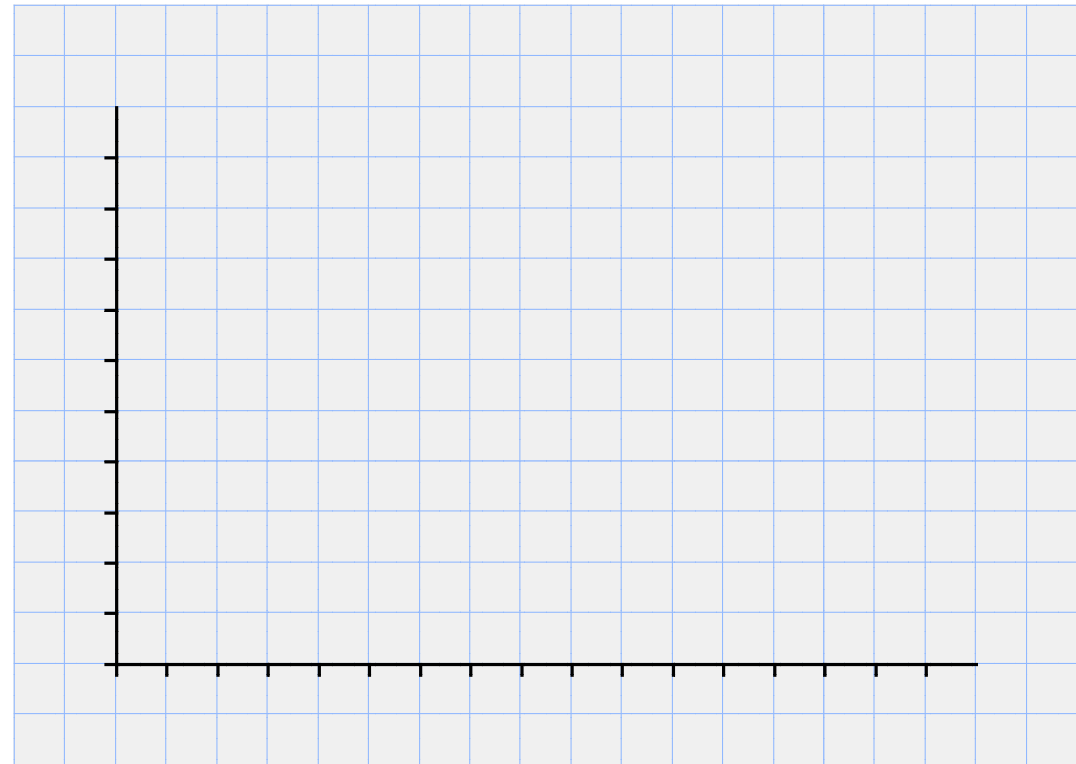
5)

x	-2	-1	0	0.5	1	2	2.5	3.5	4	4.5
y	5	3	3.5	1.5	2	0	-2	-3.5	-2	-3.5

Ordered pairs:

Points used:

Slope:



Finding the Equation: